



**ORIGINAL RESEARCH PAPER**

**Medicine**

**DEMOGRAPHIC PROFILE OF HIV PATIENTS: A PROSPECTIVE STUDY**

**KEY WORDS:** :  
Immunodeficiency syndrome, Lentivirus

<b>Dr. Padmakar Shingade</b>	Assistant professor, Department of Medicine, GMC Miraj and PVPGH Sangli.
<b>Dr. Santosh Mali*</b>	Associate professor, Department of Medicine, GMC Miraj and PVPGH Sangli. *Correspondence Author
<b>Dr. Nandkumar Patil</b>	Assistant professor, Department of Medicine, GMC Miraj and PVPGH Sangli.

**ABSTRACT**

AIDS, the Acquired Immuno Deficiency Syndrome, is a fatal illness caused by a retrovirus, HIV virus .It slowly breaks down the body's immunity thereby making the body vulnerable to various opportunistic infections. In this study population, the males were (73.75%) as compared to females (26.25%).The present study revealed that the maximum number of patients were in the age group of 30- 39 yrs (51.25%), followed by the age group 20-29 yrs (20%). In the present study, 61.25% of the patients were there from urban area and only 38.75% of the patients were from the rural areas. Maximum number of HIV positivity seen in the married group (63.75 %), followed by people who were unmarried (21.25%) and least in those who were separated (15%).Regarding the occupation, most of the occupants were labourer (43.75%) followed by housewives (18.75%). Drivers accounted for 13.75% and school going children for only 3.75% of the total case. The heterosexual mode of transmission was the most common mode of transmission, accounting for 95 % of the cases.

**Introduction:**

AIDS was first described in 1981 in the USA. Since then it became widespread in different countries of the world. It is regarded as the greatest human tragedy in the history, causing tremendous life and economical loss. AIDS or Slim Disease, is a fatal illness caused by a retrovirus, HIV virus .It slowly breaks down the body immunity thereby making the body vulnerable to various opportunistic infections. Two distinct viruses, HIV types 1& 2 (HIV -1/HIV -2) cause AIDS. HIV 1 is responsible for a vast majority of infections globally. HIV 2 is very rare outside West Africa. However cases of HIV -2 have been described in other parts of Africa, Europe,

**America, and Asia.**

With the changing scenario of AIDS epidemic, a host of opportunistic infections add to the present endemic state of some already existing infections like tuberculosis .Opportunistic infections account for the majority of the mortality and the morbidity in AIDS .Many organisms responsible for such opportunistic infections in such patients mimic similar clinical presentations. The type of pathogen responsible for morbidity and mortality vary from region to region. The identification of such pathogen is very important to manage such cases.

In India where resources are always at constraints, the evaluation based on cost and labour intensive methods, such as a CD4 count is always restricted. So in such situation timely recognition of pathogen and early institution of prophylaxis and treatment of opportunistic infections are the only economically viable options left.

**Aims and objectives:**

To study the demographic profile of HIV patients

**MATERIAL AND METHODS:**

The present study was conducted at Government Medical College and Hospital. It was hospital based prospective cohort study. This study was carried out during the period of December 2016 to December 2017.Total 80 cases had been studied during said period.

There were 3 sources of patients,first patients referred from Anti Retroviral Therapy (ART) OPD,second patients from Medicine OPD and third patients referred from Private Hospitals.

**Inclusion Criteria:**

1. HIV positive patients referred to Medicine department from ART OPD of this institute.

2. Those high risk patients presented to Medicine department, and tested positive for HIV.
3. Patient referred from other institutes and private hospitals.

**Exclusion Criteria:**

Patients below 10 yrs of age are not included in study.

Selected patients were subjected to a detailed history and thorough clinical examination. Relevant investigations were done as per individual case requirement and findings were recorded in a specially designed proforma.

All the data was analysed, documented and interpreted as per laid down protocol. Statistical significance was set as P value 0.05 and results were analysed using statistical package of social sciences (SPSS) version 16.0

**RESULTS:**

**Table No. 1 Distribution of cases according to Sex**

Sex of patient	No of cases(n=80)	Percentage
Male	59	73.75%
Female	21	26.25%
Total	80	100%

In this study , the males were 73.75% as compared to females 26.25%.

**Table No. 2 Age distribution of cases**

Age group (yrs)	No of cases (n=80)	Percentage
10-19	3	3.75%
20-29	16	20%
30-39	41	51.25%
40-49	14	17.5%
50-59	6	7.5%
>60	0	0%

This table shows that maximum number of patients were in the age group of 30- 39 yrs (51.25%), followed by the age group 20-29 yrs (20%).

**Table No. 3 Distribution of cases according to resident**

Resident	No of cases(n=80)	Percentage
Urban	49	61.25%
Rural	31	38.75%
Total	80	100%

In this study, 61.25% of the patients were there from urban area and only 38.75% of the patients were from the rural areas.

**Table No. 4 Distribution of cases according to Marital Status**

Marital Status	No. of cases	Percentage
Married	51	63.75%
Unmarried	17	21.25%
Separated	12	15%
Total	80	100%

Maximum number of HIV positivity were seen in the married group (63.75%),

followed by people who were unmarried (21.25%) and least in those who were separated (15%).

**Table no. 5 Distribution of cases according to Occupation**

Occupation	No. of cases	Percentage
Labourer	35	43.75%
Driver	11	13.75%
Service man	9	11.25%
Businessman	5	6.25%
CSWs	2	2.5%
Housewife	15	18.75%
School Children	3	3.75%
Total	80	100%

Most of the occupants were labourer (43.75%) followed by housewives (18.75%).

Drivers accounted for 13.75% and school going children for only 3.75% of the total cases.

**Table no 6 Distribution according to Type of Exposure.**

Type of Exposure	No. of cases	Percentage
Heterosexual	76	95%
Homosexual	1	1.25%
Blood transfusion	3	3.75%
IV Drug Users	0	0%
Needle Stick injury	0	0%
Total	80	100%

The heterosexual mode of transmission was the most common mode of transmission, accounting for 95% of the cases.

**Discussion:**

In this study population, the males were (73.75%) as compared to females (26.25%). This indicates more involvement of males in outdoor sexual activity. Most of the women are commercial sex workers who are involved in this profession because of either family problems or economical problems. The present study revealed that the maximum number of patients were in the age group of 30-39 yrs (51.25%), followed by the age group 20-29 yrs (20%). This indicates that most of the young population is involved by disease. This indicates a trend of young and productive generation being affected; a reflection of the devastating effects India will face as the younger generation work force is affected.

In the present study, 61.25% of the patients were there from urban area and only 38.75% of the patients were from the rural areas. This may be because many males in urban area are easily involved in outdoor sex activity as a result of peer group pressure, enjoyment or due to easy availability of money. Maximum number of HIV positivity was seen in the married group (63.75%), followed by people who were unmarried (21.25%) and least in those who were separated (15%). Usually males are more involved in extramarital affairs than females. This points that with the

spread of immorality in the society the incidence of HIV is at a rise.

Regarding the occupation, most of the occupants, were labourer (43.75%) followed by housewives (18.75%). Drivers accounted for 13.75% and school going children for only 3.75% of the total case. All males gave a history of promiscuous behaviour and casual sex who were drivers. This may be because they are travelling long distances for many days away from their families. It is very essential to use barrier methods of contraception such as condoms by these drivers. Most of the children had got the infection from their parents.

The heterosexual mode of transmission was common mode of transmission in our study accounting for 95% of the cases. Worldwide heterosexual Exposure is the commonest mode of transmission among these patients. This observation was consistent with the fact that India is considered as pattern II country in which heterosexual route is the commonest mode of transmission. This also indicates the need of education of more safer sex practices among society. Vertical transmission of HIV is also decreased due to better implementation of PPTCT (Prevention of parent to child transmission) programme.

**Conclusion:**

The incidence of HIV infection is higher in males as compared to females. HIV with opportunistic infections is the disease of youth and is prevalent in those who are sexually active. There is a trend towards involvement of the people residing in urban areas, those who are married and those hailing from a low socioeconomic class. The heterosexual mode of transmission is the most common mode of transmission in India, as compared to the prevalence of homosexuality in the western world. This indicates the need of better education about sexual practices in society particularly among schoolgoing children and young adults.

**References:**

- 1) Harrison's principles of internal medicine, 18th edition, volume 1.
- 2) UNAIDS; WHO, AIDS Epidemic update. December 2003.
- 3) SK Sharma, Tamilarasu Kadhiraavan, Amit Banga, et al. Spectrum of clinical disease in a series of 135 hospitalized HIV-infected patients from north India. BMC Infect Dis. 2004; 4: 52.
- 4) Singh A, Bairy I, Shivananda PG. Spectrum of opportunistic infections in AIDS cases. Indian journal of medical sciences. 2003; 57(1): 16-21.
- 5) David Warrel, Oxford Textbook Of Medicine, Volume 1, 4th Edition.
- 6) The history of HIV/AIDS, news letter from Mark Chickoki.
- 7) AIDS Update, NACO. 1995; Vol. 1 (2) : 5.
- 8) R Ananthanarayan and CKJ Paniker, Textbook of Microbiology, 6th Edition, Orient Long Man Publications
- 9) De Cock KM, Colebunders R, Francis H et al., Evaluation of the WHO clinical case definition for AIDS in rural Zaire, AIDS. 1988 Jun;2(3):219-21
- 10) MMWR Recommendations and Reports, 1993 Revised Classification System for HIV Infection and Expanded Surveillance Case Definition for AIDS among Adolescents and Adults, December 18, 1992/41(RR-17).